AMENDMENT TO THE CLAIMS

1. (***Previously Presented***) A fuel composition comprising:

a Mannich reaction product of

a) a polyisobutylene alkylated hydroxyaromatic compound;

b) formaldehyde or a reactive equivalent thereof; and

c) a secondary monoamine component comprising dimethylamine;

wherein the said polyisobutylene alkylated hydroxyaromatic compound is derived from a combination of a conventional polyisobutylene and a high vinylidene polyisobutylene; and wherein the said polyisobutylene alkylated hydroxyaromatic compound is derived by:

i) combining the conventional polyisobutylene and the high vinylidene polyisobutylene prior to the alkylation of the hydroxyaromatic compound; or

ii) combining a hydroxyaromatic compound alkylated with the conventional polyisobutylene and a hydroxyaromatic compound alkylated with the high vinylidene polyisobutylene;

wherein the ratio of conventional polyisobutylene to high vinylidene polyisobutylene is from 25:75 to 40:60 on a weight basis; and

wherein the Mannich reaction product is present in the fuel composition from 10 to 10,000 ppm.

2. (***Previously Presented***) The fuel composition of claim 1 wherein the conventional polyisobutylene has a trisubstituted double bond isomer content of 45 mole % or greater.

3. (***Previously Presented***) The fuel composition of claim 1 wherein the high vinylidene polyisobutylene has a combined alpha- and beta-vinylidene double bond isomer content of 70 mole % or greater.

4. (***Previously Presented***) The fuel composition of claim 1 wherein the polyisobutylene of the alkylated hydroxyaromatic compound has an alpha- and beta-vinylidene

double bond isomer content of 50 to 95 mole % and a trisubstituted double bond isomer content of 4 to 40 mole %.

5. (***Previously Presented***) The fuel composition of claim 1 wherein the said polyisobutylene is derived by combining the conventional polyisobutylene and the high vinylidene polyisobutylene prior to the alkylation of the hydroxyaromatic compound.

6. (***Previously Presented***) The fuel composition of claim 1 wherein the said polyisobutylene is derived by combining a hydroxyaromatic compound alkylated with the conventional polyisobutylene and a hydroxyaromatic compound alkylated with the high vinylidene polyisobutylene.

7. (***Previously Presented***) The fuel composition of claim 1 wherein the said polyisobutylene is derived by combining a Mannich reaction product from a hydroxyaromatic compound alkylated with the conventional polyisobutylene and a Mannich reaction product from a hydroxyaromatic compound alkylated with the high vinylidene polyisobutylene.

8. (***Previously Presented***) The fuel composition of claim 1 wherein the said polyisobutylene has a number average molecular weight ranging from 500 to 3,000.

9. (***Previously Presented***) The fuel composition of claim 1 wherein the hydroxyaromatic compound is phenol, the aldehyde is formaldehyde or a reactive equivalent thereof, and the amine is a secondary monoamine, an alkylenediamine, or a mixture thereof.

10. – 19. (***Cancelled***)

20. (***Previously Presented***) The fuel composition of claim 1 wherein said conventional polyisobutylene is derived from a process that uses an $AlCl_3$ catalyst and wherein said conventional polyisobutylene has an alpha- and/or beta-vinylidene double bond isomer content of 30 mole percent or less; and

wherein said high vinylidene polyisobutylene is derived from a process that uses a BF_3 catalyst and wherein said high vinylidene polyisobutylene has an alpha- and/or beta-vinylidene double bond isomer content of 80 mole percent or more.

21. (***Currently Amended***) The fuel composition of claim 1 wherein the ratio of conventional polyisobutylene to high vinylidene polyisobutylene is from about 30 or 31 parts conventional polyisobutylene to about 70 or 69 parts high vinylidene polyisobutylene ~~10:90 to 40:60~~ on a weight basis and wherein the Mannich additive is present in the fuel composition from 10 to 1,000 ppm.

22. (***Currently Amended***) The fuel composition of claim 20 wherein the ratio of conventional polyisobutylene to high vinylidene polyisobutylene is from about 30 or 31 parts conventional polyisobutylene to about 70 or 69 parts high vinylidene polyisobutylene ~~10:90 to 40:60~~ on a weight basis and wherein the Mannich additive is present in the fuel composition from 10 to 1,000 ppm.

23. (***Previously Presented***) The fuel composition of claim 20 wherein the amine comprises a secondary monoamine containing from 0 to 22 carbon atoms, an alkylenediamine containing more than 2 carbon atoms, or a mixture thereof; and wherein the aldehyde comprises a aliphatic aldehyde.

24. (***Previously Presented***) The fuel composition of claim 21 wherein the amine comprises a secondary monoamine containing from 0 to 22 carbon atoms, an alkylenediamine containing more than 2 carbon atoms, or a mixture thereof; and wherein the aldehyde comprises a aliphatic aldehyde.

25. (***Previously Presented***) The fuel composition of claim 22 wherein the amine comprises a secondary monoamine containing from 0 to 22 carbon atoms, an alkylenediamine containing more than 2 carbon atoms, or a mixture thereof; and wherein the aldehyde comprises a aliphatic aldehyde.

Claims 26. to 32. (***Cancelled***)

33. (***New***) The fuel composition of claim 21 wherein the amine comprises dimethylamine or ethylenediamine.

34. (***New***) The fuel composition of claim 22 wherein the amine comprises dimethylamine or ethylenediamine.